

In the Claims

Please cancel claims 63 and 74 without prejudice.

Please amend the identified claims to read as follows. A marked-up copy of these claims showing additions and deletions is attached hereto.

57. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath leaving a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which the passage through said sheath has a relatively small cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which the passage through said sheath has a relatively large cross sectional size in a plane perpendicular to the longitudinal central axis of said sheath, said sheath having an oval cross section in a plane extending perpendicular to the longitudinal central axis of said sheath when said sheath is in the contracted condition; and an array of filaments which is enclosed by said sheath and extends between axially opposite end portions of said sheath.

64. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath leaving a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which the passage through said sheath has a relatively small cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which the passage through said sheath has a relatively large cross sectional size in a plane perpendicular to the longitudinal central axis of said sheath, said sheath having an oval cross section in a plane extending perpendicular to the longitudinal central axis of said sheath when said sheath is in the contracted condition; and a variable volume chamber connected with said sheath and movable into the patient's body tissue with at least a portion of said sheath, said variable volume chamber being expandable under the influence of fluid pressure to an extended condition in which said variable volume chamber projects outward from a side surface of said sheath to retard withdrawal of said sheath from the patient's body tissue.

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D47
C4
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72. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath which at least partially encloses an array of filaments which extends between axially opposite end portions of said sheath, said sheath and said array of filaments being resiliently expandable from a contracted condition in which said sheath and said array of filaments have a relatively small cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and said array of filaments leave a relatively large cross sectional size in a plane perpendicular to the longitudinal central axis of said sheath; and a variable volume chamber connected with said sheath and insertable into the patient's body tissue with at least a portion of said sheath, said variable volume chamber being expandable under the influence of fluid pressure to an extended condition in which said variable volume chamber projects outward from a side surface of said sheath to retard withdrawal of said sheath from the patient's body tissue.

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73. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath which at least partially encloses an array of filaments which extends between axially opposite end portions of said sheath, said sheath and said array of filaments being resiliently expandable from a contracted condition in which said sheath and said array of filaments have a relatively small cross sectional size in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and said array of filaments leave a relatively large cross sectional size in a plane perpendicular to the longitudinal central axis of said sheath, wherein said sheath has a pointed end portion for piercing body tissue when said sheath and array of filaments are in the contracted condition.

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75. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath having a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which said sheath and passage have relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and passage have relatively large oval cross

sectional sizes in a plane perpendicular to the longitudinal central axis of said sheath, and a pointed end portion (at least partially formed by said sheath) for piercing body tissue when said sheath and passage have the relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath.

58
DS7
C6
77. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath having a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which said sheath and passage have relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and passage have relatively large oval cross sectional sizes in a plane perpendicular to the longitudinal central axis of said sheath, and a pointed end portion for piercing body tissue when said sheath and passage have the relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath, wherein said passage in said sheath is engagable by a member having an oval cross sectional configuration in a plane extending perpendicular to the longitudinal central axis of said sheath, said member having an oral cross sectional configuration being axially movable along said passage in said sheath to expand said sheath from the contracted condition to the expanded condition.

78. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath having a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which said sheath and passage have relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and passage have relatively large oval cross sectional sizes in a plane perpendicular to the longitudinal central axis of said sheath, and a pointed end portion for piercing body tissue when said sheath and passage have the relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath; and pump means connected in fluid communication with said passage in said sheath, said pump means being operable to provide fluid pressure which is applied

to said passage in said sheath to expand said sheath from the contracted condition to the expanded condition.

79. (Amended) An expandable cannula which is movable into a patient's body tissue, said cannula comprising a tubular sheath having a passage which extends between axially opposite end portions of said sheath, said sheath being resiliently expandable from a contracted condition in which said sheath and passage have relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath to an expanded condition in which said sheath and passage have relatively large oval cross sectional sizes in a plane perpendicular to the longitudinal central axis of said sheath, and a pointed end portion for piercing body tissue when said sheath and passage have the relatively small oval cross sectional sizes in a plane perpendicular to a longitudinal central axis of said sheath; and a variable volume chamber connected with said sheath and movable into the patient's body tissue with a least a portion of said sheath, said variable volume chamber being expandable under the influence of fluid pressure to an extended condition in which said variable volume chamber projects outward from a side surface of said sheath to retard withdrawal of said sheath from the patient's body tissue.

REMARKS

Applicants have amended the specification to update the status of one of the parent applications. Claims 57-62, 64-73, and 75-79, as amended are submitted for the Examiner's review and consideration. In this Response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

U.S. Patent No. 5,295,994

Claims 57-63 and 66-71 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,295,994 to Bonutti ("Bonutti"). For the reasons set forth below, Applicants respectfully submit that these claims are not taught or suggested by Bonutti.